OK

Waste Management Plan

Double Creek Dairy
1320 S Arboleda Dr
Merced, CA

011-COM-143

Prepared For:

Henry Te Velde
13640 Collier Rd.
Delhi CA 95315

Prepared By:

SGI Ag Services THE SOURCE GROUP, INC.

3213 Liberty Square Parkway
Turlock, CA 95382

November 30, 2011

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Double Creek Dairy

Physical address of dairy:

1320 S Arboleda DR	Merced	Merced	95340
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

TRS Data and Coordinates:

8S	15E	6	Mt. Diablo	37° 16' 14.30" N	120° 22' 21.01" W
Township (T_)	Range (R_)	Section (S_)	Baseline meridian	Latitude (N)	Longitude (W)

Date facility was originally placed in operation: 01/01/1970

Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

0067-0030-0015-0000

B. OPERATOR NAME: Te Velde, Henry Telephone no.: (209) 394-8008 (Landline) (Cellular)

13640 Collier RD	Delhi	CA	95315
Mailing Address Number and Street	City	State	Zip Code

Operator should receive Regional Board correspondence (check): [X] Yes [ ] No

C. LEGAL OWNER NAME: Strickland, Robert & Victoria Telephone no.: (209) 000-0000 (Landline) (Cellular)

1320 S Arboleda DR	Merced	CA	95340
Mailing Address Number and Street	City	State	Zip Code

Owner should receive Regional Board correspondence (check): [ ] Yes [X] No

D. CONTACT NAME: Fischer, Kenney Telephone no.: (209) 495-0690 (Cellular)

Title: Manager

3640 Collier RD	Delhi	CA	95315
Mailing Address Number and Street	City	State	Zip Code

CONTACT NAME: Ramos, Joe Telephone no.: (209) 765-7626 (Cellular)

Title: Project Manager

3213 Liberty Square PKWY	Turlock	CA	95382
Mailing Address Number and Street	City	State	Zip Code

CONTACT NAME: Sousa, Manny Telephone no.: (209) 238-3151 (Landline) (Cellular)

Title: Professional Engineer

1006 6th ST	Modesto	CA	95354
Mailing Address Number and Street	City	State	Zip Code

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HERD AND MILKING EQUIPMENT

A. HERD AND MILKING

The existing milk cow dairy is currently regulated under the General Order.

Total number of milk and dry cows combined as a baseline value in response to the Report of Waste Discharge (ROWD) request of October, 2005:

1,750 milk and dry cows combined (regulatory review is required for expansions of 15% above baseline values)

2,013 milk and dry cows combined + 15% (pre-expansion limit)

Type of Animal	Present Count	Maximum Count	Daily Flush Hours	Avg Live Weight (lbs)
Milk Cows	1,650	1,750	22	1,400
Dry Cows	175	263	6	1,500
Bred Heifers (15-24 mo.)	562	562	6	1,000
Heifers (7-14 mo.)	188	188	6	775
Calves (4-6 mo.)	564	564	6	
Calves (0-3 mo.)	186	186	20	

Predominant milk cow breed: Holstein

Average milk production: 80 pounds per cow per day

Average number of milk cows per string sent to the milkbarn: 188 milk cows per string

Number of milkings per day: 3.0 milkings per day

Number of times milk tank is emptied/filled each day: 3.0 per day

Number of hours spent milking each day: 21.0 hours per day

B. MILKBARN EQUIPMENT AND FLOOR WASH

Bulk tank wash and sanitizing: 3.0 run cycles/wash

Bulk tank wash vat volume: 75 gallons/cycle

Bulk tank wash wastewater: 675.0 gallons/day

Pipeline wash and sanitizing: 3.0 run cycles/wash

Pipeline wash vat volume: 100 gallons/cycle

Pipeline wash wastewater: 900.0 gallons/day

Reused / recycled water is the source of parlor floor wash water: [X] Yes [ ] No

Milkbarn / parlor floor wash volume: 15,000 gallons/day

Plate coolers type: Well Water Cooled (Water Reused/Recycled)

Plate coolers volume: 32,558 gallons/day

Vacuum pumps / air compressors / chillers type: Well Water Cooled (Water Reused/Recycled)

Vacuum pumps / air compressors / chillers volume: 4,500 gallons/day

Milkbarn and equipment wastewater volume generated daily: 60,475 gallons/day

C. OTHER WATER USES

Reused/recycled water is the source of herd drinking water: [ ] Yes [X] No

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Bred Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number of cows drinking from reusable water:	0 *of 1,650*	0 *of 175*	0 *of 562*	0 *of 188*	0 *of 564*	0 *of 186*
Gallons per head per day:	0	0	0	0	0	0

Total reusable water consumed by herd: 0 gallons/day

Reused/recycled water is the source of sprinkler pen water: [X] Yes [ ] No

Number of sprinklers in the holding pen: 96 sprinklers

Duration of each sprinkler cycle: 2.0 minutes

Number of sprinkler pen runs/milking: 2 cycles/milking

Flow rate for each sprinkler head: 4.0 gallons/minute

Total sprinkler pen wastewater volume: 42,900 gallons/day

Total fresh water used in manure flush lane system(s): 0 gallons/day

D. MISCELLANEOUS EQUIPMENT

Description	Source	Throughput (gallons per day)	Discharge Destination
Barn Hose	Fresh Water	1,000	Sent to pond

E. MILKBARN AND EQUIPMENT SUMMARY

Number of days in storage period: 120 days

Water available for reuse/recycle: 37,058 gallons/day

Recycled water reused: 57,900 gallons/day

Recycled water leaving system: 0 gallons/day

Reusable water balance: 0 gallons/day

Volume of milkbarn and equipment wastewater generated for storage period: 7,257,000 gallons/storage period

MANURE AND BEDDING SOLIDS

A. IMPORTED AND FACILITY GENERATED BEDDING

Bedding Type	Imported or Generated (tons)	Density (lbs/cu. ft.)	Applied Separation Efficiency (default)	Solids to Pond (cu. ft./period)
Almond shells	175	20.0	85%	2,625
Facility generated bedding	158	40.0	50%	3,950
			Total:	6,575

B. SOLIDS SEPARATION PROCESS

Combined manure solids separation efficiency (weight basis): 50 %

Description of all solids separation equipment used in flushed lane manure management systems:

Sloped Screen Mechanical Separator and Flush Pit (Solid Settling Basin).

C. MANURE AND BEDDING SOLIDS SUMMARY

	cubic feet		gallons	
	day	storage period	day	storage period
Manure generated by the herd (pre-separation):	5,362.56	643,507	40,114.71	4,813,766
Manure generated by the herd sent to pond(s):	3,427.54	411,304	25,639.75	3,076,770
Manure generated by the herd sent to dry lot(s):	1,244.86	149,384	9,312.22	1,117,466
Manure solids (herd) removed by separation:	334.10	40,092	2,499.27	299,912
Liquid component in separated solids not send to pond(s):	356.06	42,727	2,663.48	319,618
Imported and facility generated bedding sent to pond(s):	54.79	6,575	409.87	49,184
Total manure and bedding sent to pond(s):	3,482.33	417,879	26,049.62	3,125,954
Residual manure solids and bedding sent to pond(s) w/factor:	194.45	23,334	1,454.57	174,548
	cubic feet per year		gallons per year	
Residual manure solids and bedding sent to pond(s) w/factor:	70,973		530,917	

RAINFALL AND RUNOFF

A. RAINFALL ESTIMATES

Rainfall station nearest the facility: Merced

25 year/24 hour storm event (default NOAA Atlas 2, 1973): 2.50 inches/storage period

25 year/24 hour storm event (user-override): _____ inches/storage period

Storage period rainfall (default DWR climate data): 8.05 inches/storage period

Storage period rainfall (user-override): _____ inches/storage period

Flood zone: Zone AO

B. IMPERVIOUS AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24hr Storm Runoff Coefficient	Storage Period Runoff Coefficient	Runoff Destination
Dry Cow West Control Lane	5,880	1	0.97	0.50	Drains into pond(s).
Dry Cow/Heifer Center Alley	22,275	1	0.97	0.50	Drains into pond(s).
East Feed Slab	100,655	1	0.97	0.50	Drains into pond(s).
East Heifer Feed/Flush alley	27,050	1	0.97	0.50	Drains into pond(s).
Freestall Control Lanes	9,730	1	0.97	0.50	Drains into pond(s).
Main center drive	25,500	1	0.97	0.50	Drains into pond(s).
Mechanical Separator Slab	13,225	1	0.97	0.50	Drains into pond(s).

North Portion Young Heifer Drive	8,160	1	0.97	0.50	Drains into pond(s).
South Portion Young Heifer Drive	10,710	1	0.97	0.50	Drains into pond(s).
West Feed Slab	39,800	1	0.97	0.50	Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	262,985 sq. ft.
Total surface area:	262,985 sq. ft.
Runoff from normal storage period rainfall:	659,853 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	989,780 gallons/storage period
25 year/24 hour storm event runoff:	397,551 gallons/storage period
Total surface area runoff:	1,057,405 gallons/storage period
Total surface area runoff with 1.5 factor:	1,387,331 gallons/storage period

C. ROOF AREAS

Name	Surface Area (sq. ft.)	Quantity	Runoff Destination
Calf Shade barn	19,530	1	Wastewater pond
Dry Cow Freestall	6,000	1	Wastewater pond
East Commodity North Section	1,995	1	Wastewater pond
East Commodity South section	2,600	1	Wastewater pond
East freestall	77,500	1	Wastewater pond
Large Shade barn	18,400	1	Wastewater pond
Milkhouse	3,300	1	Wastewater pond
Northeast hay barn	9,750	1	Wastewater pond
Old parlor	4,089	1	Wastewater pond
Parlor	5,945	1	Wastewater pond
Shade Barns	3,200	4	Wastewater pond
Southeast Hay Barn	7,500	1	Wastewater pond
Special Needs Center Section	18,330	1	Wastewater pond
Special needs North Section	16,965	1	Wastewater pond
Special Needs South Section	7,540	1	Wastewater pond
West Commodity Shed	1,040	1	Wastewater pond
West freestall	72,500	1	Wastewater pond
West Hay Barn	8,160	1	Wastewater pond
Young Heifer Shade	4,400	1	Wastewater pond

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	298,344 sq. ft.
Total surface area:	298,344 sq. ft.
Runoff from normal storage period rainfall:	1,497,144 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	2,245,717 gallons/storage period
25 year/24 hour storm event runoff:	464,952 gallons/storage period
Total surface area runoff:	1,962,096 gallons/storage period
Total surface area runoff with 1.5 factor:	2,710,668 gallons/storage period

D. EARTHEN AREAS

Name	Surface Area (sq. ft.)	Quantity	25yr/24 Storm Coefficient	Storage Period Coefficient	Runoff Destination
Earthen areas minus roofed and concreted areas	854,605	1	0.35	0.20	Drains into pond(s).

Surface area that does not run off into pond(s):	0 sq. ft.
Surface area that runs off into pond(s):	854,605 sq. ft.
Total surface area:	854,605 sq. ft.
Runoff from normal storage period rainfall:	857,713 gallons/storage period
Runoff from normal storage period rainfall with 1.5 factor:	1,286,569 gallons/storage period
25 year/24 hour storm event runoff:	466,148 gallons/storage period
Total surface area runoff:	1,323,861 gallons/storage period
Total surface area runoff with 1.5 factor:	1,752,717 gallons/storage period

E. TAILWATER MANAGEMENT

No fields with tailwater entered.

Waste Management Plan Report
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LIQUID STORAGE

A. POND OR BASIN DESCRIPTION: Flush Pit

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions			
Earthen Length (EL):	205 ft.	Earthen Depth (ED):	9 ft.
Earthen Width (EW):	52 ft.	Side Slope (S):	1.7 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	0.0 ft.
Calculations			
Liquid Length (LL):	198 ft.	Storage Volume Adjusted for Dead Storage Loss:	43,757 cu. ft.
Liquid Width (LW):	45 ft.		
Pond Surface Area:	10,660 sq. ft.	Pond Marker Elevation:	6.2 ft.
Storage Volume:	43,757 cu. ft.	Evaporation Volume:	54,191 gals/period
		Adjusted Surface Area:	8,637 sq. ft.

POND OR BASIN DESCRIPTION: WWS 1

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions			
Earthen Length (EL):	950 ft.	Earthen Depth (ED):	17 ft.
Earthen Width (EW):	140 ft.	Side Slope (S):	2.7 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.
Calculations			
Liquid Length (LL):	939 ft.	Storage Volume Adjusted for Dead Storage Loss:	1,111,324 cu. ft.
Liquid Width (LW):	129 ft.		
Pond Surface Area:	133,000 sq. ft.	Pond Marker Elevation:	14.3 ft.
Storage Volume:	1,203,922 cu. ft.	Evaporation Volume:	748,347 gals/period
		Adjusted Surface Area:	119,272 sq. ft.

POND OR BASIN DESCRIPTION: WWS 2

Pond is rectangular in shape: [X] Yes [ ] No

Dimensions			
Earthen Length (EL):	950 ft.	Earthen Depth (ED):	13 ft.
Earthen Width (EW):	115 ft.	Side Slope (S):	2.1 ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	2.0 ft.
Calculations			
Liquid Length (LL):	942 ft.	Storage Volume Adjusted for Dead Storage Loss:	729,359 cu. ft.
Liquid Width (LW):	107 ft.		
Pond Surface Area:	109,250 sq. ft.	Pond Marker Elevation:	10.3 ft.
Storage Volume:	845,599 cu. ft.	Evaporation Volume:	619,921 gals/period
		Adjusted Surface Area:	98,803 sq. ft.

POND OR BASIN DESCRIPTION: WWS 3

Pond is rectangular in shape: [ ] Yes [X] No

Dimensions			
Earthen Length (EL):	ft.	Earthen Depth (ED):	ft.
Earthen Width (EW):	ft.	Side Slope (S):	ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	ft.
Calculations			
Liquid Length (LL):	ft.	Storage Volume Adjusted for Dead Storage Loss:	842,832 cu. ft.
Liquid Width (LW):	ft.		
Pond Surface Area:	96,065 sq. ft.	Pond Marker Elevation:	11.0 ft.
Storage Volume:	990,144 cu. ft.	Evaporation Volume:	602,697 gals/period
		Adjusted Surface Area:	sq. ft.

POND OR BASIN DESCRIPTION: WWS 4

Pond is rectangular in shape: [ ] Yes [X] No

Dimensions			
Earthen Length (EL):	ft.	Earthen Depth (ED):	ft.
Earthen Width (EW):	ft.	Side Slope (S):	ft. (h:1v)
Free Board (FB):	2 ft.	Dead Storage Loss (DS):	ft.
Calculations			
Liquid Length (LL):	ft.	Storage Volume Adjusted for Dead Storage Loss:	460,485 cu. ft.
Liquid Width (LW):	ft.		
Pond Surface Area:	47,167 sq. ft.	Pond Marker Elevation:	13.0 ft.
Storage Volume:	523,908 cu. ft.	Evaporation Volume:	295,919 gals/period
		Adjusted Surface Area:	sq. ft.

Potential storage losses (due to dead storage): 419,573.0 cubic feet - or - 3,138,624.0 gallons

Liquid storage surface area: 230,678 sq. ft.

Rainfall onto retention pond(s): 1,987,913 gallons/storage period

Rainfall runoff into retention pond(s): 3,014,710 gallons/storage period

Normal rainfall onto retention pond(s) with 1.5 factor: 2,981,869 gallons/storage period

Normal rainfall runoff into retention pond(s) with 1.5 factor: 4,522,066 gallons/storage period

Storage period evaporation (default): 13.42 inches/storage period

Storage period evaporation (user-override): inches/storage period

Storage period evaporation volume: 2,321,075 gallons/storage period

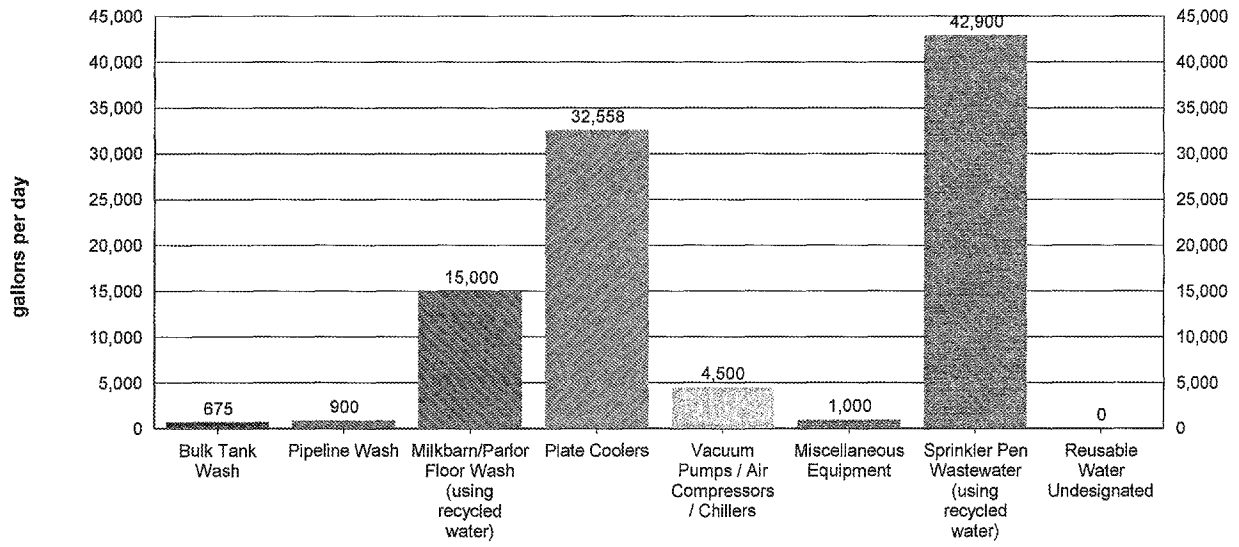
Manure and bedding sent to pond(s): 3,125,954 gallons/storage period

Milkbarn water sent to pond(s): 7,257,000 gallons/storage period

Fresh flush water for storage period: 0 gallons/storage period

CHARTS

A. MILKBARN WASTEWATER SENT TO POND(S)

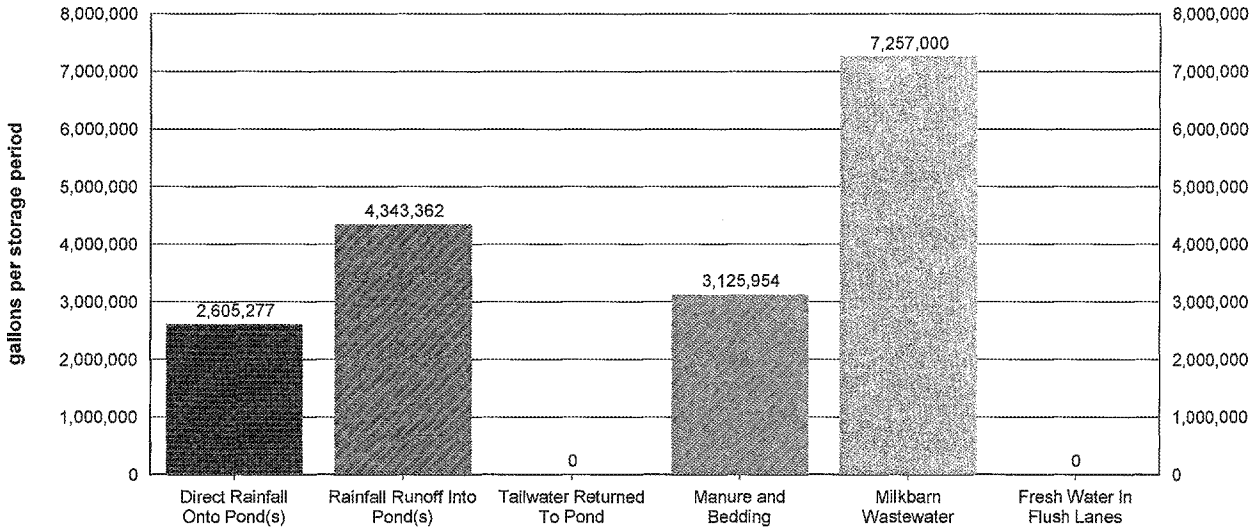


Values shown in chart are approximate values per day.

Total milkbarn wastewater generated daily: 60,475 gallons/day

Total milkbarn wastewater generated per period: 7,257,000 gallons/storage period

B. PROCESS WASTEWATER (NORMAL PRECIPITATION)

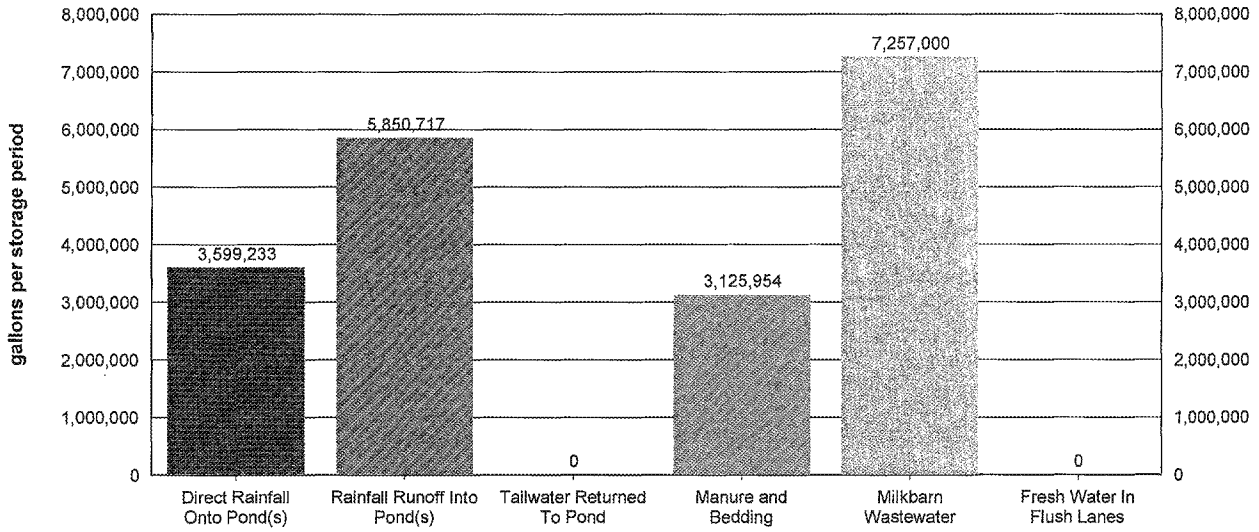


Values shown in chart are approximate values for storage period.

Storage period:	120	days
Total process wastewater generated daily:	144,430	gallons/day
Total process wastewater generated per period:	17,331,592	gallons/storage period
Total process wastewater removed due to evaporation:	2,321,075	gallons/storage period
Total storage capacity required:	15,010,517	gallons
	2,006,614	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	23,846,078	gallons
	3,187,757	cu. ft.

Considering normal precipitation, existing capacity meets estimated storage needs: [X] Yes [ ] No

C. PROCESS WASTEWATER (NORMAL PRECIPITATION WITH 1.5 FACTOR)

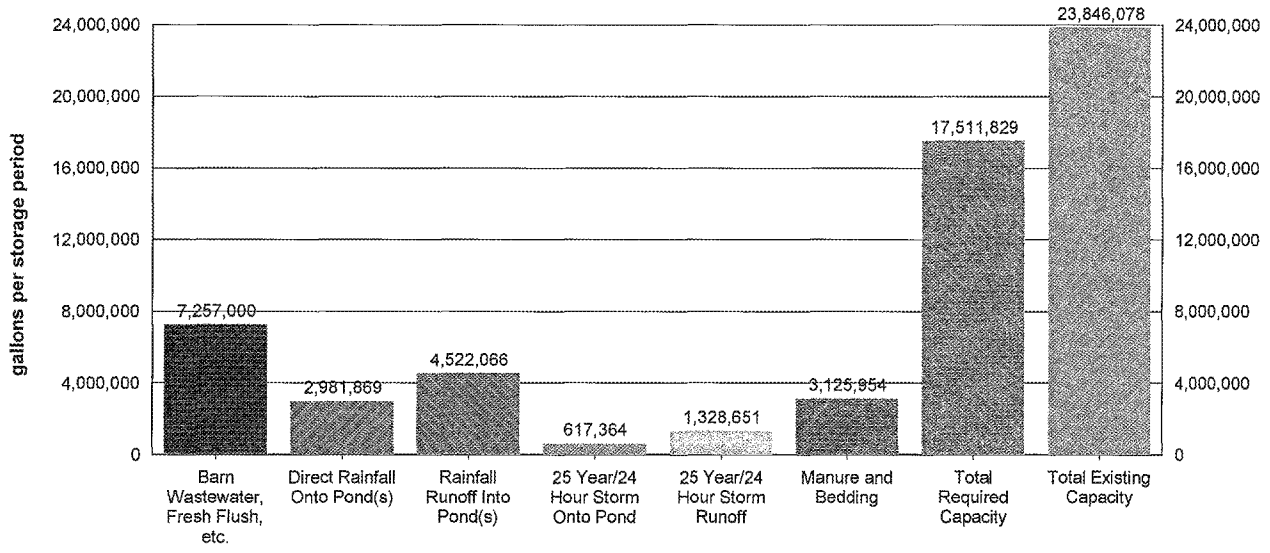


Values shown in chart are approximate values for storage period.

Storage period:	120	days
Total process wastewater generated daily:	165,274	gallons/day
Total process wastewater generated per period:	19,832,904	gallons/storage period
Total process wastewater removed due to evaporation:	2,321,075	gallons/storage period
Total storage capacity required:	17,511,829	gallons
	2,340,991	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	23,846,078	gallons
	3,187,757	cu. ft.

Considering factored precipitation, existing capacity meets estimated storage needs: [X] Yes [ ] No

D. STORAGE VOLUME ASSESSMENT (NORMAL PRECIPITATION WITH 1.5 FACTOR)



Values shown in chart are approximate values for storage period.

Storage period:	120	days
Barn wastewater, fresh flush water, and tailwater:	7,257,000	gallons/storage period
Manure and bedding sent to pond:	3,125,954	gallons/storage period
Precipitation onto pond:	2,981,869	gallons/storage period
Precipitation runoff:	4,522,066	gallons/storage period
25 year/24 hour storm onto pond:	617,364	gallons/storage period
25 year/24 hour storm runoff:	1,328,651	gallons/storage period
Residual solids after liquids have been removed (liquid equivalent):	174,548	gallons/storage period
Total process wastewater removed due to evaporation:	2,321,075	gallons/storage period
Total required capacity:	17,511,829	gallons/storage period
Total existing capacity:	23,846,078	gallons/storage period
Existing capacity meets estimated storage needs:	[X] Yes [ ] No	

OPERATION AND MAINTENANCE PLAN

The goal of the Operation and Maintenance Plan is to eliminate discharges of waste or storm water to surface waters from the production area and the protection of underlying soils and ground water.

A. POND MAINTENANCE

i. FREEBOARD MONITORING

1. Freeboard will be monitored monthly from June 1 through September 1 (dry season) and weekly from October 1 through May 31 (wet season). The results will be recorded on a Dairy Production Area Visual Inspection Form.
2. Freeboard will be monitored during and after each significant storm event and the results recorded on a Production Area Significant Storm Event Inspection Form.
3. Ponds will be photographed on the first day of each month. Pond photos will be labeled and maintained with the dairy's monitoring records.

ii. PREPARATION FOR MAINTAINING WINTER STORAGE CAPACITY

1. The retention pond(s) will begin to be lowered to the minimum operating level on or before a designated date each year.
2. The minimum operating level will include the necessary storage volume as identified in Section II.A in Attachment B of the General Order.

iii. OTHER POND MONITORING

1. At the time of each monitoring for freeboard, the pond(s) will be inspected for evidence of excessive odors, mosquito breeding, algae, or equipment damage; and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Other Pond Monitoring.
2. At the time of each monitoring during and after each significant storm event, the ponds will be inspected for evidence of any discharge and issues with berm integrity, including cracking, slumping, erosion, excess vegetation, animal burrows, and seepage. Any issues identified and corrective actions performed will be recorded on a Production Area Significant Storm Event Inspection Form.

iv. SOLIDS REMOVAL PROCEDURES

It is not recommended that solids be allowed to accumulate to the critical solids level. Storages should be cleaned regularly to ensure accumulation in the storages does not exceed the critical solids level at the beginning of the storage period.

1. The average thickness of the solids accumulated on the bottom of the pond(s) will be measured on the designated interval using the owner, operator, and/or designer specified procedure.
2. Once solids/sludge on the bottom of the pond(s) reach the owner, operator, and/or designer specified critical thickness, solids/sludge will be removed so that adequate capacity is maintained.
3. When necessary, solids/sludge will be removed using the owner, operator, and/or designer specified methods for protecting any pond liner.

OPERATIONS AND MAINTENANCE PLAN FOR POND: Flush Pit

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 0 feet above the pond invert beginning in May of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 5.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Solids can be removed with either a long reach backhoe or excavator.

OPERATIONS AND MAINTENANCE PLAN FOR POND: WWS 1

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2 feet above the pond invert beginning in May of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application.

OPERATIONS AND MAINTENANCE PLAN FOR POND: WWS 2

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2 feet above the pond invert beginning in May of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application.

OPERATIONS AND MAINTENANCE PLAN FOR POND: WWS 3

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2 feet above the pond invert beginning in May of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are agitated and then transferred to Flush Pit.If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application.

OPERATIONS AND MAINTENANCE PLAN FOR POND: WWS 4

Dry season freeboard monitoring will occur on the 5th of each month.

Wet season freeboard monitoring will occur every Monday of each week.

Process wastewater pond contents will be lowered to the minimum operating level (elevation) of 2 feet above the pond invert beginning in May of each year.

Sludge accumulation will be measured annually.

The following method will be used to measure solids/sludge accumulation:

Sludge accumulation should be measured at pond drawdown with a probe that can indicate sludge thickness.

When solids/sludge accumulate to a thickness of 3.0 feet, the following method will be used to maintain adequate storage capacity while protecting any pond liner:

Water is added throughout the year to dilute solids. Solids are pumped out during irrigations. If necessary, storage can also be agitated and pumped into slurry wagons or directly excavated for Spring and/or Fall application.

B. RAINFALL COLLECTION SYSTEM MAINTENANCE

i. Annually, rainfall collection systems will be assessed to ensure:

1. Conveyances are free of debris and operating within designer/manufacturer specifications.
2. Components are properly fastened according to designer/manufacturer specifications.
3. All downspouts and related infrastructure are connected to conveyances that divert water away from manured areas.
4. Water from the rainfall collection system(s) is diverted to an appropriate destination.

Buildings with rooftop rainfall collection systems	Quantity	Surface Area (sq. ft.)
Calf Shade barn	1	19,530
Dry Cow Freestall	1	6,000
East Commodity North Section	1	1,995
East Commodity South section	1	2,600
East freestall	1	77,500
Large Shade barn	1	18,400
Milkhouse	1	3,300
Northeast hay barn	1	9,750
Old parlor	1	4,089
Parlor	1	5,945
Shade Barns	4	12,800
Southeast Hay Barn	1	7,500
Special Needs Center Section	1	18,330
Special needs North Section	1	16,965
Special Needs South Section	1	7,540

West Commodity Shed	1	1,040
West freestall	1	72,500
West Hay Barn	1	8,160
Young Heifer Shade	1	4,400

Assessment for buildings with rooftop rainfall collection systems will occur on or before: 5th of October

Assessment for other rainfall collections systems will occur on or before: 5th of October

Description of how rainfall collection systems will be assessed:

Gutters and downspouts will be inspected, cleaned and repaired as needed.

C. CORRAL MAINTENANCE

i. Monthly from June 1st through September 30th (dry season) and weekly from October 1st through May 31st (wet season), the perimeter of the corrals and pens will be assessed to ensure that runon and runoff controls such as berms are functioning correctly, and that all water that contacts waste is collected and diverted into the wastewater retention pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Corrals.

ii. The corrals will be assessed by the designated date to determine:

1. Whether manure needs to be removed from the corrals based on the owner, operator, and/or designer specified conditions.

2. Whether there are depressions within the corrals that should be filled/groomed to prevent ponding.

iii. Removal of manure and/or regrading, when necessary, will be completed on or before the designated month/day of each year.

Day of the month dry season assessment will occur: 5th of each month

Day of the week wet season assessment will occur: Monday

Solid manure removal and regrading assessment will occur on or before: 5th of October

Conditions requiring manure removal and/or regrading:

Solids are typically removed twice per year, usually in the Spring and Fall following harvest.

Solid manure removal and/or regrading will occur on or before: 5th of November

D. FEED STORAGE AREA MAINTENANCE

i. During the dry season and prior to the wet season, the perimeter of storage areas will be assessed to ensure all runon and runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.

ii. During the wet season, feed storage area(s) will be assessed to determine if there are depressions within any feed storage area that should be filled or repaired to prevent ponding.

iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 5th of each month

Day of the week wet season assessment will occur: Monday

Regrading/resurfacing and berm maintenance assessment will occur on or before: 5th of October

Regrading/resurfacing and berm maintenance completion will occur on or before: 5th of November

E. SOLID MANURE STORAGE AREA MAINTENANCE

i. During the dry season and prior to the wet season, the perimeter of manure storage areas will be assessed to ensure all runon and runoff controls such as berms are functioning correctly and runoff and leachate from the areas are collected and diverted into the wastewater pond(s). Any issues identified and corrective actions performed will be recorded on a Dairy Production Area Visual Inspection Form - Manure and Feed Storage Areas.

ii. During the wet season, manure storage area(s) will be assessed to determine if there are depressions within any manure storage area that should be filled to prevent ponding.

iii. Any necessary regrading/resurfacing and berm/conveyance maintenance will be completed on an annual basis.

Day of the month dry season assessment will occur: 5th of each month

Day of the month wet season assessment will occur: Monday

Regrading/resurfacing and berm maintenance assessment will occur on or before: 5th of October

Regrading/resurfacing and berm maintenance completion will occur on or before: 5th of November

F. ANIMAL HOUSING AND FLUSH WATER CONVEYANCE SYSTEM MAINTENANCE

i. A map will be attached that identifies critical points for monitoring the animal housing and flush water conveyance system to verify that water is being managed as identified in this Waste Management Plan. These points will be maintained at owner, operator, and/or designer specified intervals.

Animal housing area assessment will occur on or before: 5th of October

Animal housing drainage system maintenance will occur on or before: 5th of November

Animal housing area drainage system assessment and maintenance methods:

Debris is removed from flush lanes, drains and corral drains as needed.

Pumps are monitored daily.

Corrals are regraded and dirt is added as needed to retain slope and prevent ponding.

G. MORTALITY MANAGEMENT

i. Dead animals will be stored, removed, and disposed of properly.

Rendering company or landfill name: Darling International

Rendering company or landfill telephone number: (559) 268-5325

H. ANIMALS AND SURFACE WATER MANAGEMENT

i. A system will be in place, monitored, and maintained to prevent animals from entering any surface waters when a stream or other surface water crosses or adjoins the corral(s).

Does a stream or any other surface water cross or adjoin the corrals? [ ] Yes [X] No

I. MONITORING SALT IN ANIMAL RATIONS

i. The combined quantity of minerals as salt in animal drinking water and feed rations will be reviewed by a qualified nutritionist on a routine basis to verify that minerals are limited to the amount required to maintain animal health and optimum production. As feed rations change, mineral content may change.

Assessment interval: Annually

J. CHEMICAL MANAGEMENT

i. Chemicals and other contaminants handled at the facility will not be disposed of in any manure or process wastewater, storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.

Chemical Name	Quantity	Units	Frequency	Usage Area	Destination (Used Chemical / Container)	Disposal Company		Collection Frequency
						Name	Phone	
Round Up	115	gallons	year	Field application, roadways, borders	County container recycling program.			
Oberon	30	gallons	year	Field Application	County container recycling program.			
Rhomene	60	gallons	year	Field Application	County container recycling program.			
Shark	4	gallons	year	Field Application	County container recycling program.			
Chlorine	820	gallons	year	Milkbarn	Picked up by distributor			
Formaldahyde	330	gallons	year	Milkbarn	Picked up by distributor			
Alkaline Cleaner Detergent	840	gallons	year	Milkbarn	Picked up by distributor			

REQUIRED ATTACHMENTS

The following list, based upon user selections and data entries, describes the minimum required attachments that must be submitted with the Waste Management Plan for the reporting schedule of 'July 1, 2010'.

A. SITE MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: structures used for animal housing, milk parlor, and other buildings; corrals and ponds; solids separation facilities (settling basins or mechanical separators); other areas where animal wastes are deposited or stored; feed storage areas; drainage flow directions and nearby surface waters; all water supply wells (domestic, irrigation, and barn wells) and groundwater monitoring wells.

Production area map reference number: Figure 2

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) including the following in sufficient detail: a field identification system (Assessor's Parcel Number; field by name or number; total acreage of each field; crops grown; indication if each field is owned, leased, or used pursuant to a formal agreement); indication of what type of waste is applied (solid manure only, wastewater only, or both solid manure and wastewater); drainage flow direction in each field, nearby surface waters, and storm water discharge points; tailwater and storm water drainage controls; subsurface (tile) drainage systems (including discharge points and lateral extent); irrigation supply wells and groundwater monitoring wells; sampling locations for discharges of storm water and tailwater to surface water from the field.

Application area map reference number: Figure 3

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all cropland (land that is part of the dairy but not used for dairy waste application) including the following in sufficient detail: Assessor's Parcel Number, total acreage, crops grown, and information on who owns or leases the field. The Waste Management Plan shall indicate if such cropland is covered under the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Order No. R5-2006-0053 for Coalition Group or Order No. R5-2006-0054 for Individual Discharger, or updates thereto).

Non-application area map reference number: None

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of all off-property domestic wells within 600 feet of the production area or land application area(s) associated with the dairy and the location of all municipal supply wells within 1,500 feet of the production area or land application area(s) associated with the dairy.

Well area map reference number: Figure 2-3

Provide a site map (or maps) of appropriate scale to show property boundaries and a vicinity map, north arrow and the date the map was prepared. The map shall be drawn on a published base map (e.g., a topographic map or aerial photo) using an appropriate scale that shows sufficient details of all facilities.

Vicinity map reference number: Figure 1

B. PROCESS WASTEWATER MAP(S)

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of the production area including the following in sufficient detail: process wastewater conveyance structures, discharge points, and discharge /mixing points with irrigation water supplies; pumping facilities and flow meter locations; upstream diversion structures, drainage ditches and canals, culverts, drainage controls (berms/levees, etc.), and drainage easements; and any additional components of the waste handling and storage system.

Production infrastructure system area map reference number: Figures 2

Provide a site map (or maps) of appropriate scale to show property boundaries and the location of the features of all land application areas (land under the Discharger's control, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling) including the following in sufficient detail: process wastewater conveyance structures, discharge points and discharge mixing points with irrigation water supplies; pumping facilities ; flow meter locations; drainage ditches and canals, culverts, drainage controls (berms, levees, etc.), and drainage easements.

Land application infrastructure system area map reference number: Figures 2&3

C. EXCESS PRECIPITATION CONTINGENCY REPORT

There were no attachment references entered or required for this attachment section.

D. OPERATION AND MAINTENANCE PLAN

Attach a map that identifies critical points for monitoring the system to verify that water is being managed as identified in this Waste Management Plan (see Attachment B, Pg B-7 V.F, V.G, and V.H for additional requirements).

Animal housing assessment map reference number: Figure 2

E. FLOOD PROTECTION / INUNDATION REPORT

Provide an engineering report showing that the facility has adequate flood protection.

Flood zone map and/or document reference number: 06047C0445G

F. BACKFLOW PROTECTION

Attach documentation from a trained professional (i.e. a person certified by the American Backflow Prevention Association, an inspector from a state or local governmental agency who has experience and/or training in backflow prevention, or a consultant with such experience and/or training), as specified in Required Reports and Notices H.1 of Waste Discharge Requirements General Order No. R5-2007-0035, that there are no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the Site Map.

Backflow documentation reference number: Backflow certificate

Waste Management Plan Report
General Order No. R5-2007-0035, Attachment B
July 1, 2010 deadline

CERTIFICATION

A. DAIRY FACILITY INFORMATION

Name of dairy or business operating the dairy: Double Creek Dairy

Physical address of dairy:

1320 S Arboleda DR	Merced	Merced	95340
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

B. DOCUMENTATION OF QUALIFICATIONS AND PLAN DEVELOPMENT

I have reviewed the portion of the waste management plan that is related to storage capacity facility and design specifications in accordance with Item II, Attachment B of the Waste Discharge Requirements General Order for Existing Milk Cow Dairies - Order No. R5-2007-0035 and certify that this plan was prepared by, or under the responsible charge of, and certified by a civil engineer who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work.

Storage capacity is:

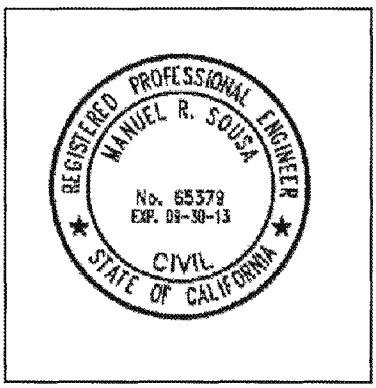
Insufficient

☐ Retrofitting Plan/Schedule/Design Criteria attached in accordance with Attachment B, II.B. 1-5 and Attachment B, II. C.

Sufficient

☒ Certification 1 - Certified in accordance with Attachment B, II. A. 1-8. (no contingency plan)

☐ Certification 2 - Certified in accordance with Attachment B, II. A. 1-8, II. C. (with contingency plan attached)



CIVIL ENGINEER'S WET STAMP

M. R. Sou — 12-19-11

SIGNATURE OF CIVIL ENGINEER — DATE

Manny Sousa
PRINT OR TYPE NAME

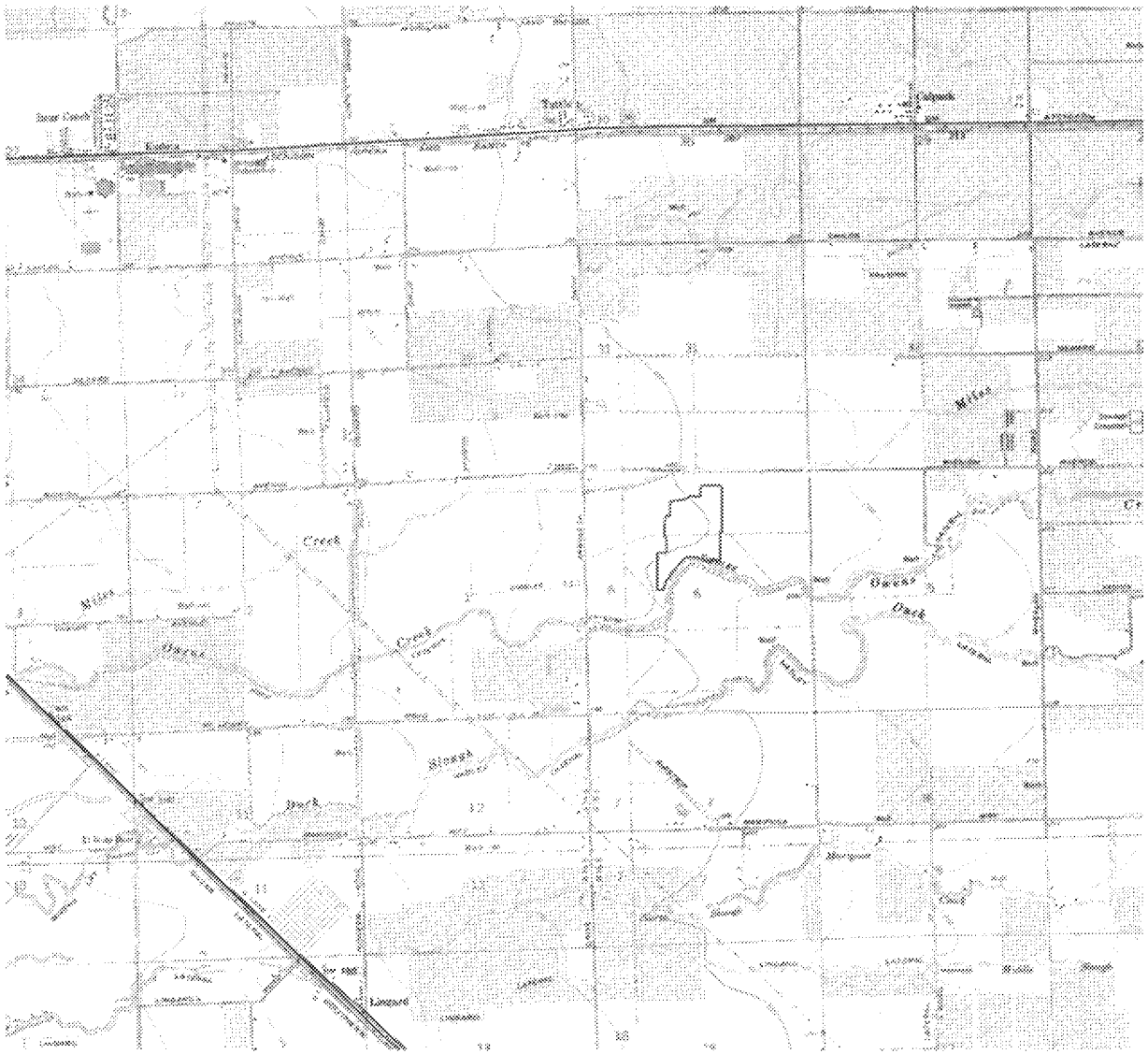
1006 6th ST; Modesto, CA 95354
MAILING ADDRESS

(209) 238-3151
PHONE NUMBER

C. OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE OF OWNER	SIGNATURE OF OPERATOR
Robert & Victoria Strickland	~~Henry Te Velde~~ MATT STRICKLAND
PRINT OR TYPE NAME	PRINT OR TYPE NAME
12/27/11	12/27/11
DATE	DATE



LEGEND

☐ Facility Boundary

THE SOURCE GROUP, INC.
3451-C VINCENT ROAD
PLEASANT HILL, CA 94523

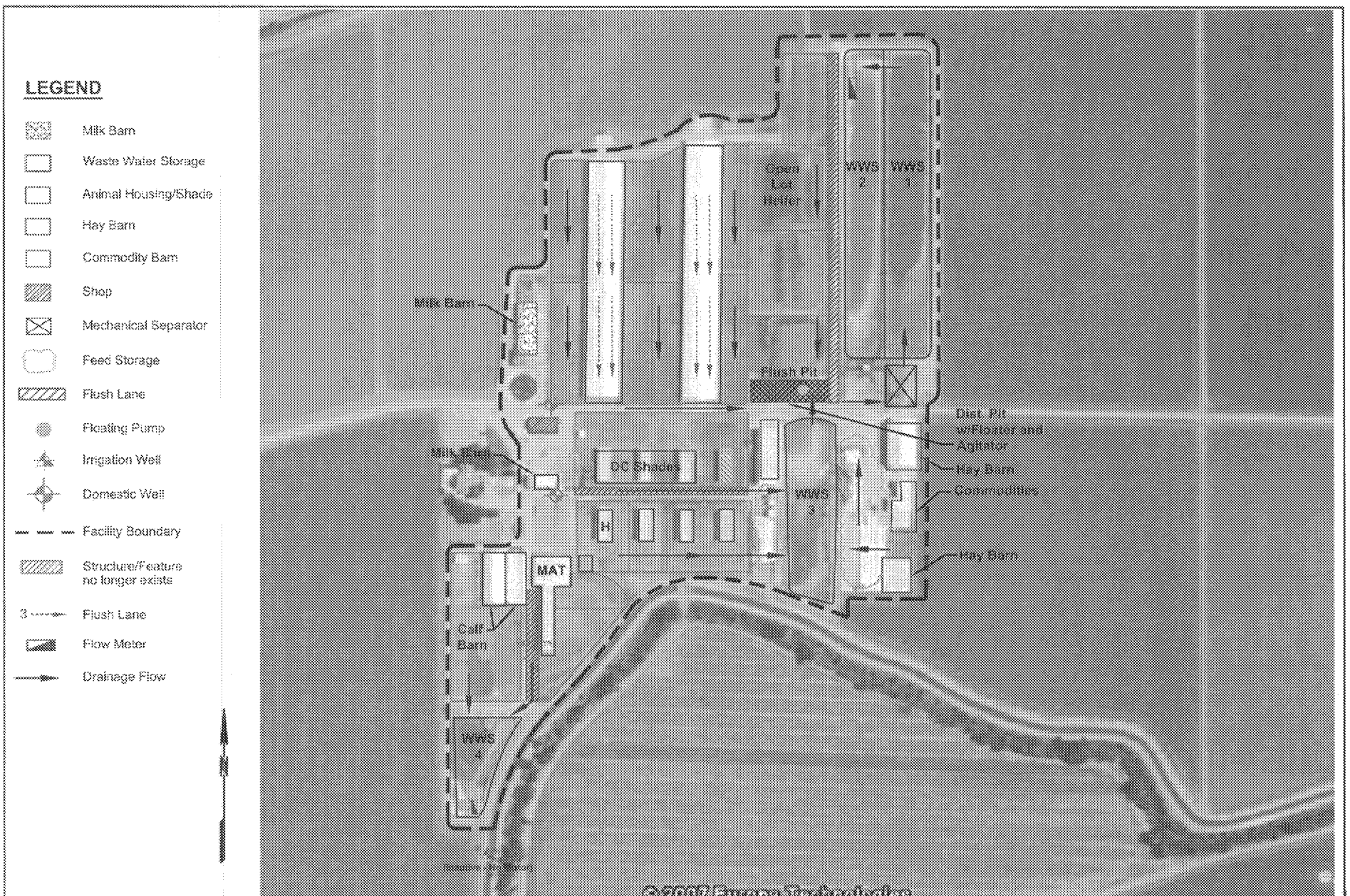
SCALE:
0 4,000 8,000
HORIZONTAL SCALE IN FEET

DOUBLE CREEK RANCH
MERCED COUNTY, CA

FIGURE 1
TOPOGRAPHIC MAP

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
011-COM-001	3/24/08	SB	TP

#143



SGI THE SOURCE GROUP, INC.
environmental
3451-C VINCENT ROAD
PLEASANT HILL, CA 94523

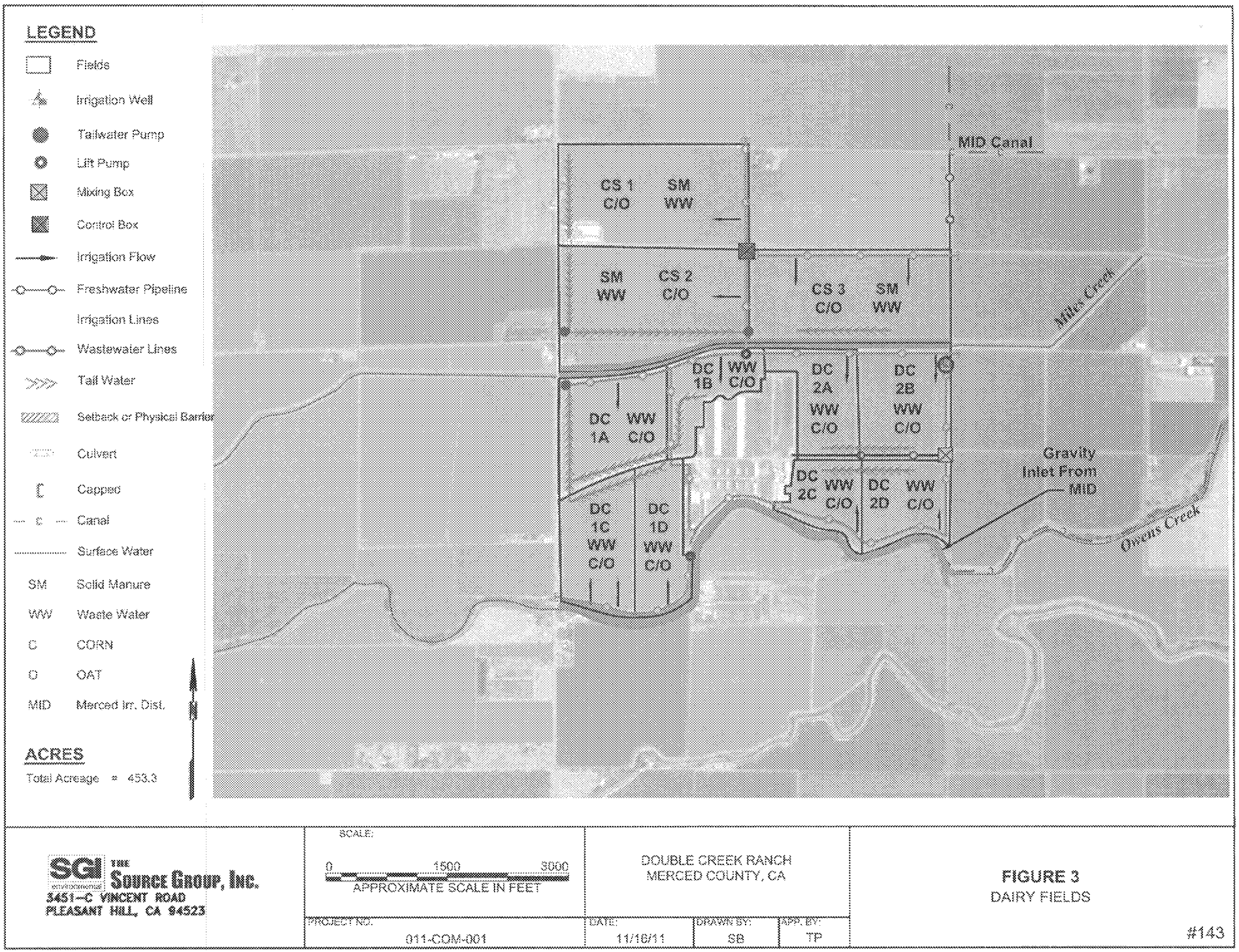
SCALE:
0 500 1000
APPROXIMATE SCALE IN FEET

DOUBLE CREEK RANCH
MERCED COUNTY, CA

FIGURE 2
DAIRY FACILITY

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
011-COM-001	1/8/09	SB	TP

#143



THE SOURCE GROUP, INC.
3451-C VINCENT ROAD
PLEASANT HILL, CA 94523

SCALE:
0 1500 3000
APPROXIMATE SCALE IN FEET

DOUBLE CREEK RANCH
MERCED COUNTY, CA

FIGURE 3
DAIRY FIELDS

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:
011-COM-001	11/16/11	SB	TP

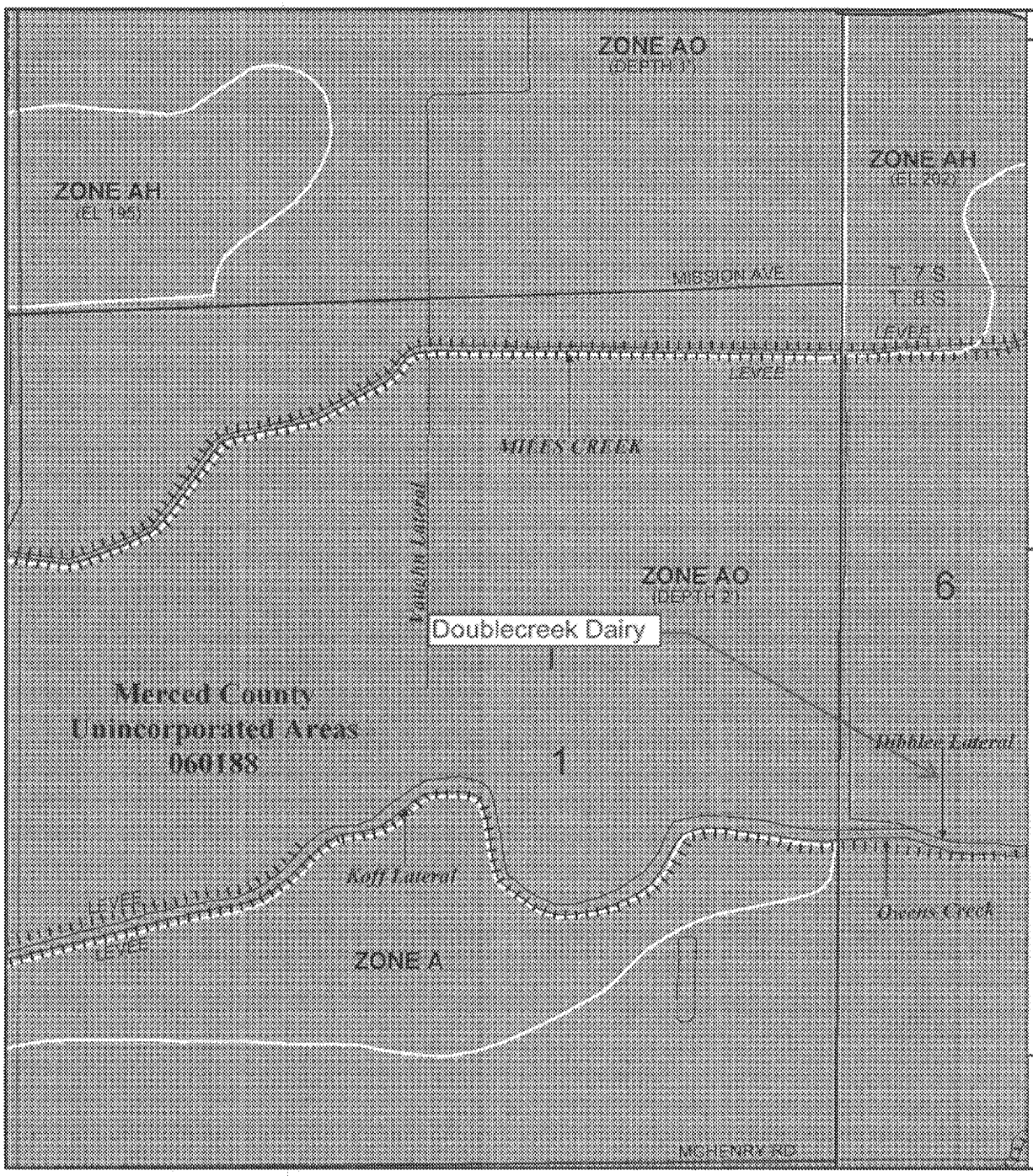
#143

SGI Ag Services THE SOURCE GROUP, INC.

LAND APPLICATION AREA FIELD INFORMATION ATTACHMENT

DAIRY NAME: JVJ Doublecreek
DAIRY ADDRESS:

APN	FIELD ID	ACRES	CROPS GROWN	OPERATED BY DAIRY OWNER	LEASED BY DAIRY OPERATOR	LEASED BY OTHER	NUTRIENTS APPLIED
067-003-015	DC1A	41	Corn/Oats	No	Yes		Solid Manure/Wastewater
067-003-015	DC1B	22.9	Corn/Oats	No	Yes		Solid Manure/Wastewater
067-003-015	DC1C	35.9	Corn/Oats	No	Yes		Solid Manure/Wastewater
067-003-015	DC1D	29.1	Corn/Oats	No	Yes		Solid Manure/Wastewater
067-003-015	DC2A	28.1	Corn/Oats	No	Yes		Solid Manure/Wastewater
067-003-015	DC2B	39.4	Corn/Oats	No	Yes		Solid Manure/Wastewater
067-003-015	DC2C	19.2	Corn/Oats	No	Yes		Solid Manure/Wastewater
067-003-015	DC2D	29	Corn/Oats	No	Yes		Solid Manure/Wastewater
053-120-026	CS1	69.3	Corn/Oats	Yes			Solid Manure/Wastewater
053-120-024	CS2	73.3	Corn/Oats	Yes			Solid Manure/Wastewater
053-120-027	CS3	71.4	Corn/Oats	Yes			Solid Manure/Wastewater



MAP SCALE 1" = 1000'

0 1000 2000 FEET

0 300 600 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0445G

FIRM

FLOOD INSURANCE RATE MAP

MERCED COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 445 OF 1225

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

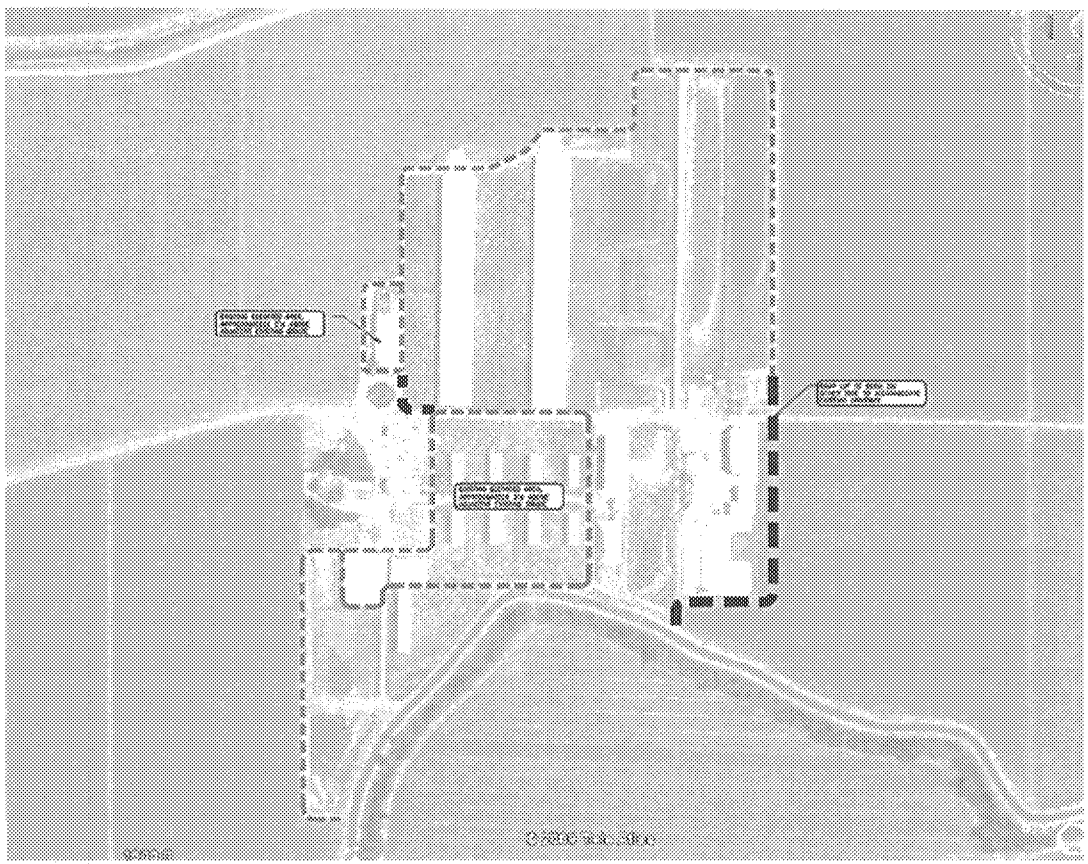
COMMUNITY	NUMBER	PANEL	SUFFIX
MERCED, CITY OF	060142	0445	G
MERCED COUNTY	060183	0445	G

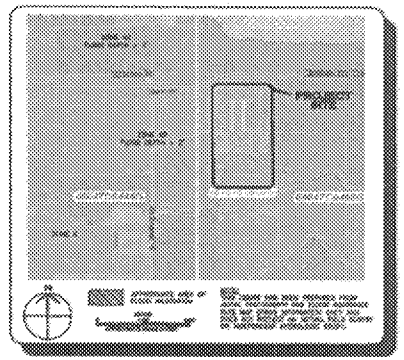
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
06047C0445G

MAP REVISED
DECEMBER 2, 2008

Federal Emergency Management Agency





FLOOD INUNDATION MAP

LEGEND

NOTES:

3451-C VINCENT ROAD
PLEASANT HILL, CA 94523

CONCEPTUAL
FLOOD PROTECTION
PLAN

COM-143
DOUBLECREEK
DAIRY

MERCED COUNTY, CA

SOUSA
ENGINEERING
SERVICES

SHEET
1
OF
1

FORM FOR DOCUMENTING BACKFLOW PREVENTION UNDER WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035 FOR EXISTING MILK COW DAIRIES

This form consists of six parts and can be used to document compliance with the requirements in Waste Discharge Requirements General Order No. R5-2007-0035 for owners/operators of existing milk cow dairies (Dischargers) to:

1. Identify cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the dairy's Site Map;

2. Propose and schedule corrective action to prevent backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the dairy's Site Map; and/or

3. Document there are no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the dairy's Site Map.

The Discharger must complete this form except for Parts IV and V, which are to be completed by a trained professional[1]. Both the owner and the operator of the dairy must sign the certification statement in Part VI. Additional sheets may be attached as necessary to complete Parts I, II, and III.

A Site Map must be attached to this form that shows all water supply wells, irrigation wells, and surface water bodies in the dairy's Production Area and all Land Application Areas that are under the Discharger's control. The Site Map must also show all wastewater conveyance structures, wastewater discharge points to surface water, and where wastewater is mixed/blended with fresh irrigation water in these areas. Each of these locations must be identified by a name or number and listed in Part II below. Completion of Part II will identify how backflow can or does occur at each location and any current backflow preventive measures.

PART I: DAIRY FACILITY INFORMATION

A. Name of Dairy or Business Operating the Dairy: Double Creek Dairy

Physical address of Dairy:

1320 So. Arboleda Dr.	Merced	Merced	95340
Number and Street	City	County	Zip Code

B. Operator Name: Henry TeVelde Telephone No: (209) 394-8008

Operator mailing address:

13640 Colliee Rd.	Delhi	Merced	95315
Number and Street	City	County	Zip Code

C. Owner Name: Robert & Victoria Stickland Telephone No: (209) 394-8008

Owner Mailing Address:

1320 So Arboleda Dr.	Merced	Merced	95340
Number and Street	City	County	Zip Code

[1] A trained professional could be a person certified by the American Backflow Prevention Association, an inspector for a state or local governmental agency who has experience and/or training in backflow prevention, or a consultant with such experience and/or training.

FORM FOR DOCUMENTING BACKFLOW PREVENTION
UNDER
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035
FOR
EXISTING MILK COW DAIRIES

PART II: IDENTIFICATION OF EXISTING BACKFLOW CONDITIONS (due by 1 July 2008)
The attached Site Map identifies all of the locations in the Production Area and all Land Application Areas under the control of the Discharger at the dairy identified in Part I above where there are cross-connections that could, or do, allow the backflow of wastewater into a water supply well, irrigation well, or surface water. For each location shown on the map, the table below describes:

a. How and where wastewater can potentially, or does, backflow to a groundwater supply and/or surface water supply (if there are no current or potential backflow problems, indicate so with "none"), and

b. How backflow of process wastewater into the groundwater or surface water supply is currently prevented (if there is no current prevention method, indicate so with "none").

Location Where Backflow can Occur	How Backflow Can or Does Occur	Current Backflow Preventive Measure
DC2B well	Comingling of wastewater at	Double Chemigation Checkvalve
	inlet From pump To irrigation Line	
Potential For backflow of wastewater		
into Surface water was not inspected		
Self Certification Form will be Completed by producer		

FORM FOR DOCUMENTING BACKFLOW PREVENTION
UNDER
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035
FOR
EXISTING MILK COW DAIRIES

PART III: PROPOSED BACKFLOW CORRECTIVE ACTIONS AND SCHEDULE (due by 1 July 2008)

For each location identified in Part II above where there is currently no backflow prevention, the table below identifies:

a. The method proposed to be implemented that will prevent backflow, and

b. A schedule to install the preventive measure.

If there are no current or potential backflow problems identified in Part II above, this Part does not need to be completed.

Location With No Current Backflow Prevention	Proposed Backflow Prevention Method	Schedule to Install Proposed Backflow Prevention Method
OC2B well	Double Chemigation Check valve	Completed

PART IV: DOCUMENTATION OF EXISTING BACKFLOW CONDITIONS AND PROPOSED BACKFLOW PREVENTION METHODS (due by 1 July 2008)

As a trained professional in backflow prevention, I certify that, based on the information provided to me by the Discharger named above and my personal examination of the wastewater system, the above information in Part II above is true, accurate, and complete and the proposed backflow prevention method in Part III above will be effective to prevent the backflow of wastewater into a water supply well, irrigation well, or surface water at the dairy named in Part I above.

CDQAP Backflow Training Class
QUALIFICATIONS OF TRAINED PROFESSIONAL (EDUCATION AND/OR EXPERIENCE)

Lee Ramos 1/30/10
SIGNATURE OF TRAINED PROFESSIONAL DATE

Lee Ramos
PRINT OR TYPE NAME

FORM FOR DOCUMENTING BACKFLOW PREVENTION
UNDER
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035
FOR
EXISTING MILK COW DAIRIES

PART V: DOCUMENTATION THAT THERE ARE NO CROSS-CONNENCTIONS THAT WOULD ALLOW THE BACKFLOW OF WASTEWATER INTO A WATER SUPPLY WELL, IRRIGATION WELL, OR SURFACE WATER (due by 1 July 2009)

As a trained professional in backflow prevention, I certify that, based on the information provided to me by the Discharger named in Part I above and my personal examination of the wastewater system, that the backflow prevention methods proposed in Part III above (if any) have been completed, and/or there are currently no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water at the dairy named in Part I above.

CDFA Training Class
QUALIFICATIONS OF TRAINED PROFESSIONAL (EDUCATION AND/OR EXPERIENCE)

Joe Ramos 1/30/10
SIGNATURE OF TRAINED PROFESSIONAL DATE

Joe Ramos
PRINT OR TYPE NAME

PART VI: OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Vicki Strickland
SIGNATURE OF OWNER

VICKI STRICKLAND
PRINT OR TYPE NAME

12/22/11
DATE

SIGNATURE OF OPERATOR

MATT STRICKLAND
PRINT OR TYPE NAME

12/22/11
DATE

FORM FOR DOCUMENTING BACKFLOW PREVENTION UNDER WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035 FOR EXISTING MILK COW DAIRIES

This form consists of six parts and can be used to document compliance with the requirements in Waste Discharge Requirements General Order No. R5-2007-0035 for owners/operators of existing milk cow dairies (Dischargers) to:

1. Identify cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the dairy's Site Map;

2. Propose and schedule corrective action to prevent backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the dairy's Site Map; and/or

3. Document there are no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water as identified on the dairy's Site Map.

The Discharger must complete this form except for Parts IV and V, which are to be completed by a trained professional[1]. Both the owner and the operator of the dairy must sign the certification statement in Part VI. Additional sheets may be attached as necessary to complete Parts I, II, and III.

A Site Map must be attached to this form that shows all water supply wells, irrigation wells, and surface water bodies in the dairy's Production Area and all Land Application Areas that are under the Discharger's control. The Site Map must also show all wastewater conveyance structures, wastewater discharge points to surface water, and where wastewater is mixed/blended with fresh irrigation water in these areas. Each of these locations must be identified by a name or number and listed in Part II below. Completion of Part II will identify how backflow can or does occur at each location and any current backflow preventive measures.

PART I: DAIRY FACILITY INFORMATION

A. Name of Dairy or Business Operating the Dairy: Doublecreek Dairy

Physical address of Dairy:

1320 So. Arboleda Dr.	Merced	Merced	95340
Number and Street	City	County	Zip Code

B. Operator Name: Henry TeVelde Telephone No: (209) 394-8008

Operator mailing address:

13640 Collier Rd.	Delhi	Merced	95315
Number and Street	City	County	Zip Code

C. Owner Name: Robert & Victoria Strickland Telephone No: (209) 394-8008

Owner Mailing Address:

1320 So Arboleda Dr.	Merced	Merced	95340
Number and Street	City	County	Zip Code

[1] A trained professional could be a person certified by the American Backflow Prevention Association, an inspector for a state or local governmental agency who has experience and/or training in backflow prevention, or a consultant with such experience and/or training.

FORM FOR DOCUMENTING BACKFLOW PREVENTION
UNDER
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035
FOR
EXISTING MILK COW DAIRIES

PART II: IDENTIFICATION OF EXISTING BACKFLOW CONDITIONS (due by 1 July 2008)
The attached Site Map identifies all of the locations in the Production Area and all Land Application Areas under the control of the Discharger at the dairy identified in Part I above where there are cross-connections that could, or do, allow the backflow of wastewater into a water supply well, irrigation well, or surface water. For each location shown on the map, the table below describes:

a. How and where wastewater can potentially, or does, backflow to a groundwater supply and/or surface water supply (if there are no current or potential backflow problems, indicate so with "none"), and

b. How backflow of process wastewater into the groundwater or surface water supply is currently prevented (if there is no current prevention method, indicate so with "none").

Location Where Backflow can Occur	How Backflow Can or Does Occur	Current Backflow Preventive Measure
DCAB well	Comingling of wastewater at	Double Chemigation Checkvalve
	inlet from pump To irrigation Line	
Potential for backflow of wastewater		
into Surface water was not inspected		
Self Certification Form will be Completed by producer		

FORM FOR DOCUMENTING BACKFLOW PREVENTION
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WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035
FOR
EXISTING MILK COW DAIRIES

PART III: PROPOSED BACKFLOW CORRECTIVE ACTIONS AND SCHEDULE (due by 1 July 2008)

For each location identified in Part II above where there is currently no backflow prevention, the table below identifies:

a. The method proposed to be implemented that will prevent backflow, and

b. A schedule to install the preventive measure.

If there are no current or potential backflow problems identified in Part II above, this Part does not need to be completed.

Location With No Current Backflow Prevention	Proposed Backflow Prevention Method	Schedule to Install Proposed Backflow Prevention Method
OC2B well	Double Chemigation Check valve	Completed

PART IV: DOCUMENTATION OF EXISTING BACKFLOW CONDITIONS AND PROPOSED BACKFLOW PREVENTION METHODS (due by 1 July 2008)

As a trained professional in backflow prevention, I certify that, based on the information provided to me by the Discharger named above and my personal examination of the wastewater system, the above information in Part II above is true, accurate, and complete and the proposed backflow prevention method in Part III above will be effective to prevent the backflow of wastewater into a water supply well, irrigation well, or surface water at the dairy named in Part I above.

CDQAP Backflow Training Class
QUALIFICATIONS OF TRAINED PROFESSIONAL (EDUCATION AND/OR EXPERIENCE)

SIGNATURE OF TRAINED PROFESSIONAL

1/30/10
DATE

Joe Ramos
PRINT OR TYPE NAME

FORM FOR DOCUMENTING BACKFLOW PREVENTION
UNDER
WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035
FOR
EXISTING MILK COW DAIRIES

PART V: DOCUMENTATION THAT THERE ARE NO CROSS-CONNENCTIONS THAT WOULD ALLOW THE BACKFLOW OF WASTEWATER INTO A WATER SUPPLY WELL, IRRIGATION WELL, OR SURFACE WATER (due by 1 July 2009)

As a trained professional in backflow prevention, I certify that, based on the information provided to me by the Discharger named in Part I above and my personal examination of the wastewater system, that the backflow prevention methods proposed in Part III above (if any) have been completed, and/or there are currently no cross-connections that would allow the backflow of wastewater into a water supply well, irrigation well, or surface water at the dairy named in Part I above.

CDQAP Training Class
QUALIFICATIONS OF TRAINED PROFESSIONAL (EDUCATION AND/OR EXPERIENCE)

[signature]
SIGNATURE OF TRAINED PROFESSIONAL

1/30/10
DATE

Joe Ramos
PRINT OR TYPE NAME

PART VI: OWNER AND/OR OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

[signature]
SIGNATURE OF OWNER

Henry teVelde DVM
SIGNATURE OF OPERATOR

Robert Strickland
PRINT OR TYPE NAME

Henry teVelde
PRINT OR TYPE NAME

6/29/10
DATE

6/29/10
DATE